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Operations and Services Hydrologic Services Program, NWSPD 10-9

WEATHER FORECAST OFFICE HYDROLOGIC REPORTING

NOTICE: This publication is available at: http://www.nws.noaa.gov/directives/

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Signed September 17, 2002

Gregory A. Mandt Director, Office of Climate, Water, and Weather Services Date

Weather Forecast Office Hydrologic Reporting

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- 1. <u>Introduction</u>. The National Weather Service (NWS) requires centralized collection of reports on river gaging stations and recent hydrologic activity to support agency operations and management of the Hydrologic Services Program. This directive provides instructions on the hydrologic reports required from Weather Forecast Offices (WFO). Preparation of the forms and reports described below is the responsibility of the service hydrologist or hydrology focal point at the WFO.
- 2. <u>River Station Description and History</u>.
- 2.1 <u>Report on River Gage Station Weather Service Form E-19</u>. Weather Service (WS) Form E-19 provides a complete history of all gages that have been used for public forecasts since establishment of the station. It is used for operational reference and serves as a quick review of the public service needs within a particular river reach at the onset of and during a flood. It can also serve as a reference document in the continuing education of all staff members in the station's hydrologic service program. Update the WS form E-19 at least every 10 years for each river station.
- 2.2 <u>Abridged Report on River Gage Station Weather Service Form E-19a</u>. WS Form E-19a updates the basic station information in WS Form E-19. Complete WS Form E-19a within 60 days of when a river station is incorporated into the NWS program. Update WS Form E-19a for significant events, such as the discontinuance of a river stage reporting station (30 days).

WS Form E-19a should be on file for all river gaging stations used by the NWS in any part of the hydrologic services program regardless of ownership. These stations are specifically defined as:

a. Forecast Points – Locations along streams for which hydrologic forecast and warning services are provided by WFOs.

- b. Data Points Locations routinely used for data input to RFC or WFO hydrologic forecast procedures.
- c. Special Points Locations where flood forecasts are issued in terms of specific crest heights on the gage at the station.
- 3. <u>Monthly Report of River and Flood Conditions.</u>
- 3.1 <u>Weather Service Form E-5</u>. Prepare a monthly report of river and flood conditions using WS Form E-5. By the 15th of the following month, send this report to the Hydrologic Information Center (W/OS31) with copies to the appropriate river forecast center and hydrologic services division, hydrologic and climate services division, or hydrologic services branch (within a climate, water, and weather division) at regional headquarters. Additional copies of the report may be sent to other offices based on local agreements.
- 3.1.1 <u>River Conditions</u>. When no floods have occurred, include in the monthly report miscellaneous hydrologic and climatological conditions such as significant rises, record low stages, ice conditions, opening and closing of the river to navigation, snow cover and droughts.
- 3.1.2. <u>Flood Conditions</u>. When a flood occurs, prepare a descriptive summary of the flooding. The report should be comprehensive but concise and should include the following:
 - a. A statement as to the rivers, areas, and states in which the floods occurred, the period of flooding, its magnitude, interesting or unusual features, if floods were of unusual severity, and a tabular comparison with past floods.
 - b. A summary relative to the rainfall or other conditions causing the floods, indicating the approximate average precipitation over the basins.
 - c. A brief summary of flood damages in general terms, indicating location and extent, number of deaths by states, and total damage (if available). Monetary savings resulting from forecasts issued, whether or not any damage resulted.
 - d. A general statement as to warnings and forecasts issued and effectiveness of services provided by the NWS.
 - e. Flood stage report (See Section 3.2).
- 3.2 <u>Weather Service Form E-3 Flood Stage Report</u>. Prepare WS Form E-3 whenever a river crests at or above flood stage. Rivers and stations in flood are listed in a downstream order. Carefully check crest stages and duration above flood stage. Provide inclusive dates for the duration of flooding for each station. Days with flood stage or higher will be considered in determining the duration of the flood. Submit WS Form E-3 with WS Form E-5.